AMENDMENTS TO THE SPECIFICATION

Please replace Paragraph [0027] with the following paragraph rewritten in amendment format:

[0027] An exemplary thermal model using a single state variable, bulk friction device temperature (T_C), is provided according to the following equations:

$$T_{Cderiv} = \left(\frac{1}{M_{clutch}}\right)\left(H_R - K_{diss}\left(T_C - T_{sump}\right)\right)$$

$$T_{Cderiv} = \left(\frac{1}{M_{friction\,device}}\right)\left(H_R - K_{diss}\left(T_C - T_{sump}\right)\right)$$

$$T_C = T_C + \left(\Delta t \cdot T_{Cderiv}\right)$$

where:

H_R = heat rate (input)
T_{sump} = sump temperature (input)
Δt = loop time of the thermal model
$M_{friction\ device}$ = approximate thermal inertia of the friction device system (J/°C)
K_{diss} = heat rejection of friction device and cooling system (W/°C)

The thermal model functions as a low-pass filter that tracks the value $\frac{H_R}{K_{diss}} + T_{sump}$ with a time constant equal to $\left[\!\left[\frac{M_{clutch}}{K_{diss}}\right]\!\right]\frac{M_{friction\,device}}{K_{diss}}$. Any similar low-pass filter function can be implemented to effectively perform as a thermal model.